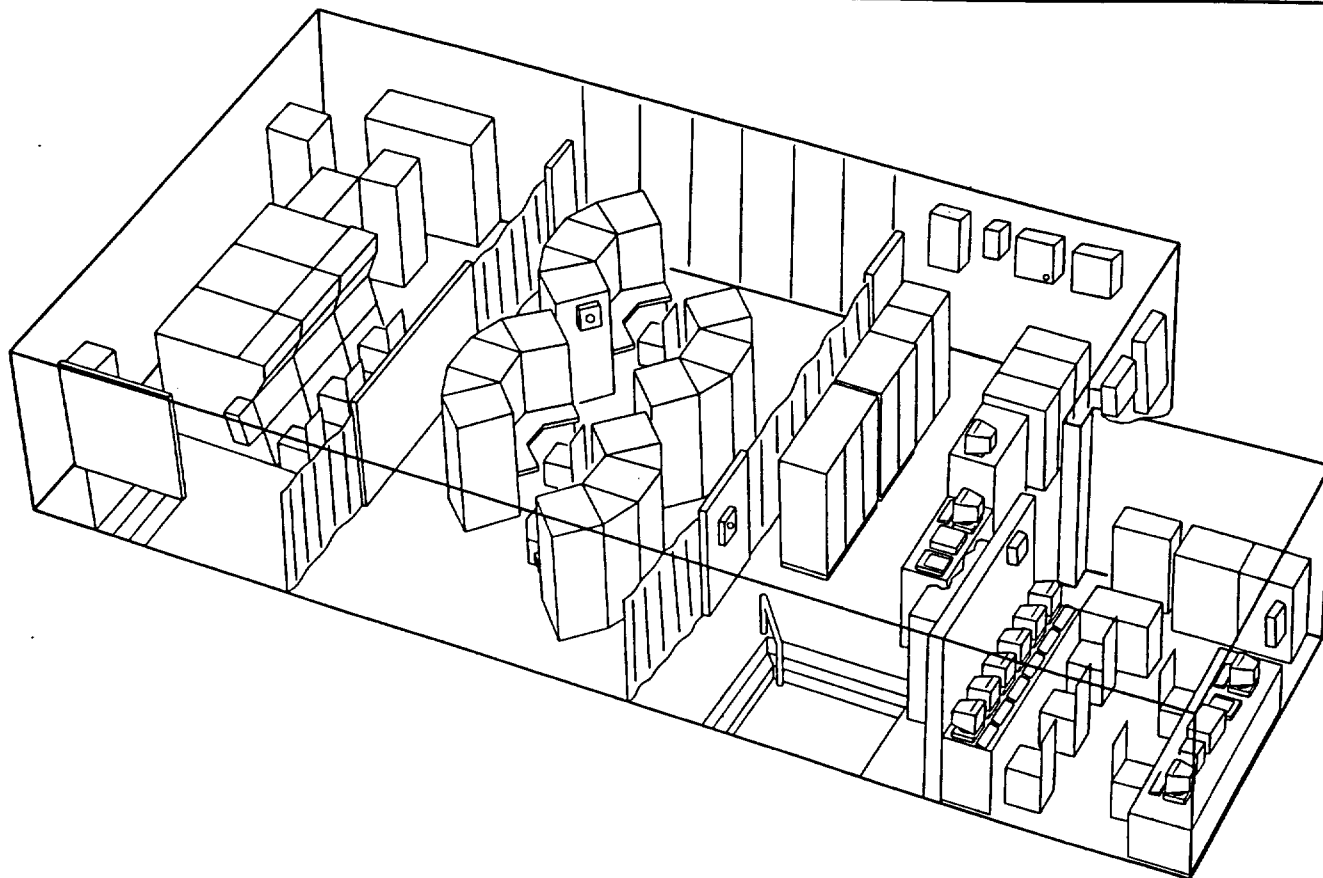


SUMMARY OF E-2C AIRCRAFT TACTICS TRAINER

JANUARY 1996

NAVAL AIR WARFARE CENTER TRAINING SYSTEMS DIVISION

DEVICE 15F8C
ORLANDO, FLORIDA



TRAINING CATEGORY:

Radar (AEW/Navigation)

ORIGINATING AGENCY:

CNO/AIR

SECURITY CLASSIFICATION OF DEVICE:

Device 15F8C is classified Secret

PURPOSE OF DEVICE:

To provide realistic training in the tactical use of the E-2C Weapons Systems.

INTENDED USE:

Device 15F8C E-2C Tactics Trainer is used to train the Combat Information Center Officer (CICO), Air Control Officer (ACO), and the Radar Operator (RO) of the E-2C aircraft.

FUNCTIONAL DESCRIPTION:

Device 15F8C simulates the aircraft CIC Compartment, associated equipment characteristics, and the external physical and electronic environment of the E-2C Airborne Tactical Data System (TADS). The Trainer consists of a Trainee area, Instructor Operator area, and simulation equipment area. Three (3) general purpose mini computers located in the simulation equipment area provide the main simulation software for the Trainer Device.

The Device configuration which is presented to the CIC crew during the training problem, is that of the actual aircraft. This operational equipment supplies to the CIC crew members, as a result of simulation, radar displays and controls, radio and result of simulation; radar displays and controls, radio and environmental sounds associated with communications, and Instructor controlled tactical scenarios representing a typical ATDS environment.

The Trainee area, which consists of the CIC Console, Computer Programmer (L-304), and the Forward Equipment Simulator Cabinet, provides familiarization, as well as advanced tactical training, for the E-2C aircrew with search radar, IFF and

PDS detection system operation, navigation techniques, ICS, voice communications and data link operation; Computer Programmer operation. Control Indicator Group operation for threat evaluation, weapon assignment and intercept control and In-Flight Performance Monitor (IFPM) System operation.

The Instructor Operator area, with its four (4) Instructor Stations, allows the operators to control all aspects of training, including scenario freeze, advance and real time modification. In addition, it provides direct supervision of the students and enables training on important operating procedures which cannot be normally practiced in the aircraft. Emergency procedures encountered by CIC aircrew are limited to the procedures necessary to compensate for decreased operational capability due to an operator inserted malfunction.

The simulation equipment area consists of three (3) mini computers (SIMCOM) and their peripheral devices, Radar/IFF Simulation System (RISS), Simulation Interface Cabinets, and Trainee Monitoring and Recording System (TMRS). The SIMCOM's drive the Trainer electronics with the necessary data for presenting the training scenario to the Trainee area CIC Compartment. The RISS provides radar and IFF simulation, including landmass, target and environmental videos, to the student displays. The Interface Cabinets provide the interface for the Audio/Comm, CIC, and Computer Programmer to the SIMCOM and Instructor Stations. The TMRS allows recording of the student displays along with the radio and ICS Audio.

PHYSICAL INFORMATION:

Trainee Area:

10' high x 15' deep x 26.5' wide

Instructor Operator Area:

10' high x 17' deep x 26.5' wide

Simulation Equipment Area:

10' high x 15.5' deep x 26.5' wide

EQUIPMENT REQUIRED (NOT SUPPLIED):

None

POWER REQUIREMENTS:

- 1) 120/208 VAC, 60Hz, 3 Phase, 5 Wire (Wye), 30.3 KVA
- 2) 115 VAC, 400Hz, 3 Phase, 5 Wire (Wye), 4.5 KVA

PUBLICATIONS FURNISHED:

1. Maintenance Instructions, E-2C Tactics Trainer, Device 15F8C, NAWCTSD P-6969(U), Vols. 1 thru 6.
2. Maintenance Requirements Cards, E-2C Tactics Trainer, Device 15F8C, NAWCTSD P-6970(U).
3. General Operations Handbook/Instructor Utilization Handbook, 15F8C Series Tactics Trainer, NAWCTSD P-6972(U), Vols. I thru IV, and Slide/Script Programs I thru IX.
4. Trainer Test Procedures and Results Report (TTPRR), E-2C Tactics Trainer, Device 15F8C, Vols. I thru XVIII, Report No. TS/E2-CTT-E-R-94-144(U) (CDRL E00J).
5. Trainer Criteria Report, E-2C Tactics Trainer, Device 15F8C, Vols. I thru VII, Report No. TS/E2-CTT-92-E-114(U), (CDRL E003).
6. Trainer Simulation Software Description Text, Flow Chart and Listings, E-2C Tactics Trainer Device 15F8C, Report No. TS/E-2CTT-95-E-R-208(U).

PERSONNEL:

Instructors: One E-2C NFO qualified as an 15F8C Instructor, per trainee.

Operators: One Device 15F8C qualified Instructor per Station (total 4).

Maintenance: Staffed under Contractor Operations and Maintenance Support (COMS) contract.

Trainees: Three (3) per training session; (1) Combat Information Center Officer (CICO), (1) Air Combat Officer (ACO), and (1) Radar Operator (RO).

CONTRACT IDENTIFICATION:

Manufactured by Grumman Aerospace Corporation, Bethpage, New York, under NAWCTSD Contract No. N61339-91-C-0094.

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